

## Leading Events

## DOMAIN OF SPORTS.

IXXVII.

## Slaws and Lily Whites Meet for the First and Last Time at Ascot Track Today

### Encouragement of the Curtailment of Production Results in a Large Rush of Orders—Business Looks Good for the Motor Makers.

(BY DIRECT WIRE—EXCLUSIVE DISPATCH.)

made fifty different types. We were trying to find the class of material needed to minimize its weight, to determine the exact weight and size of the engines, and along with it the development of the plow. Finally, we succeeded.

"Early in 1917 the English government sent a call for tractors in large numbers. Mr. Ford decided that I had better go to England and build the tractors there if possible. He was determined to give the Allies every chance in the world to lick the Kaiser. After looking the country over, I decided to build the tractors

"They will give the Kalser something he isn't looking for," Mr. Ford said. "The tractor is the only natural resource we have. It is impossible to do the work there. Immediately I rushed back, and today we are commencing the English order for 6000 tractors."

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"Not only will the tractor provide food for soldiers on the fighting lines, but they will give a large number of them to the Kalser. It is our chance to serve their country, and that proves it," exclaimed Mr. Ford as he pointed his finger at a tractor which had just been driven with ease by a half-trained man.

"Harry E. Hansen, a department head in the tractor plant, was the one who first suggested that Ford was sitting at the steering wheel. Although the gear shift is on the left side of the tractor, and Mr. Ford is right-handed, he is not used to having no difficulty in operating the powerful machine.

Just came to show Mr. Ford that the tractor was fit to be a-cripple to do a man's work again," he said with a laugh. "And I guess I have done it."

"You bet you have. Good boy," came the reply.

**SALES MANAGER  
TAKES NEW JOB.**

F. H. Schreiner, who has been prominent in the Los Angeles automobile trade for the past five years, last week assumed the position of retail sales manager for the Southwestern Motors, Buick, Cadillac and Columbia distributors. Schreiner was until recently sales manager of the Los Angeles branch of the Willys-Overland.

**CROSSMAN RETURNS  
TO HIS OLD PLACE.**

A. W. Crossman, former head of the local branch of the Studebaker corporation and since that time high mogul at the Chicago agency, has been again put in charge in this city, changing places with L. A. Kellar. Mr. Kellar has been in Los Angeles only a few months, having come from the Northwest and he will take Mr. Crossman's place in Chicago.

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## BANGING DOORS IS A POOR PRACTICE.

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The average car owner may be surprised to learn that banging the car doors is a bad practice. Shocks

of this kind often cause the enameled finish to chip and fall off, to the detriment of the car's appearance.

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## HISS CAUSED BY UNFIRED CHARGE.

Sometimes a sharp hissing sound is heard at intervals and seeming to come from one of the cylinders. Often this is mistaken for a leak, but the irregularity of its occurrence destroys this hypothesis, as a leak would occur at every period of high compression. The sound is due to an unfired charge, which fills the exhaust port and is ignited when the next fired charge passes the valve. Such a misfire may be due to weak

# GNU YW'K

**N**EW YORK, March 15.—GNU Yw'k has no time for the boxers, but it can spare a few moments for the wrestlers. This is not a boost for the grapplers, but a awful slam at the boxers. I landed in this port the night of the Stecher-Bryzako match. From the spectators' standpoint it was all in the

member. All that the pee-pig got out of it was two drab, dull hours while two human porpoises puffed and wheezed without getting anywhere except off the mat a few times. The men specialized—Stecher in avoiding the Pole's toothed, and Zbyzsko in avoiding the farm boy's body seissors. Stecher couldn't master the big shears on Zbyzsko, and Wladeck found Joe's educated

A black and white photograph of a man in a flight suit and goggles, looking down. The man is wearing a flight suit with a high collar and goggles resting on his forehead. He is looking down and slightly to the right. The image is grainy and has a high-contrast, almost sculptural quality.

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IN war time our output of motor cars is reduced, because the Government relies upon the Packard factory for motors and other important material.

**Q** But the need for dependable transportation was

never so great.

¶ Whatever the number of Twin Six cars

Whatever the number of Twin Six cars we can produce, they reflect unswerving devotion to an ideal—to build the best

we know and always better than before.

by the same organization which for 19 years has never lost sight of those essen-

tial elements which are the foundation stones of Packard character.

¶ This season's enclosed carriages are all strikingly new designs. The lines,

finish and appointments set a higher standard for motor vehicles. The verdict of competent critics is that there

dict of competent critics is that these latest Twin Six carriages mark an important step in that advancement and

leadership which have been and will continue to be consistently Packard.

Ask the Man who Owns One

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CALIFORNIA DISTRIBUTOR

San Francisco  
Oakland  
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Bakersfield  
San Diego  
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1000 So. Hope Street



1991

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Boys Have Chance to Make Future for Themselves as Mechanics in Motor Factory

ROSY FUTURE FOR THE AUTOMOBILE INDUSTRY.

Executive of Large Company Expresses His Faith in the Business.

INTENSIVE confidence in the future of the motor-car industry coupled with an unbounded enthusiasm marks the attitude of Richard H. Collins, president and general manager of the Cadillac Motor Car Company, who is in California for a brief visit.

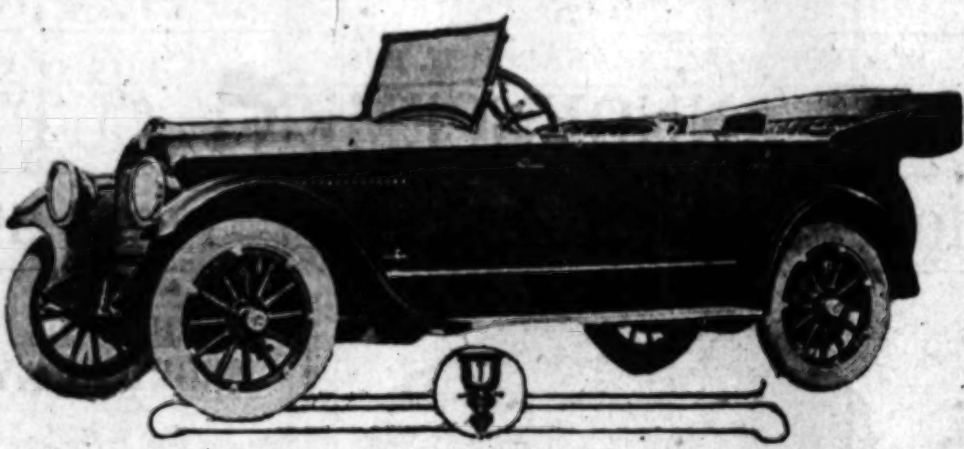
President Collins is probably the most important figure in the motor world who will visit California this year and he brings a message of business good cheer. No man is better qualified to judge the present and future of this great industry of all industries as he has been closely identified with the industry from its early days. He knows the business in all its branches and as the head of one of the largest and most important companies in the country his views become worthy of serious consideration by every man in the motor-car business in California.

A PROPHET. Despite the gloomy straits of the motor industry President Collins considers the growth insignificant to what the future holds. He believes, and men who have put their millions into the business agree with him, that the manufacture of automobiles is to become our first industry. For every man who desires to succeed he sees the most successful years in the future. He predicts a record demand for cars during 1918, and he also predicts the greatest shortage in automobiles since the beginning of the industry. This shortage he says will be caused by the shortage of labor. In this connection he sounds a new note in the connection with the development of the young men of the country.

"I believe that air craft will develop after the war faster than the automobile has since the days of the one-cylinder," said President Collins. "The engineering experts of every government are being directed to the development of airplanes, and I firmly believe that within five years all mail between the Atlantic and Pacific will be delivered by airplane. In other words, the great distances between the East and the West must be cut down. Modern development demands it, and the airplane is the best method that suggests itself for cutting down this distance."

AERIAL WORK. "I talked recently with representatives of the British government, and it was their opinion that the airplane as a means of transport in the annihilation of distances will come upon the world almost in a day. These British engineers expect to ultimately see mail between London and the colonies delivered by airplane, and it is also their opinion that the United States is neglecting important work in not mapping airplane routes and providing landing places that will be required in the large centers. "This entrance of the airplane in our modern business life will in no way affect the automobile industry. The building of airplanes and airplanes motors has already become a business of tremendous proportions in this country. In our own factories, for instance, many airplane motors are being built at the present time, and we will soon reach a capacity of fifty motors a day."

SCARCITY. "A shortage of high grade motor cars is already being felt and this will become more acute as the months go on. It is not so much a question of factory capacity or



That nifty new Studebaker big six, now on view. This is the first locally-published photograph of the new 1918 model Studebaker big six which has created quite a sensation since being placed on view at the local branch.

SEDAN IS IN ITS REAL ELEMENT IN CALIFORNIA.

GLANCE over the ancient publicity sheets of the automobile industry reveals many interesting facts. How well we recollect the motor cars of the early days without tops or windshields running on the streets. Little attention was paid to the comforts of the passengers in those days. To make the car run was the sole aim of the manufacturer.

Once the mechanical part of the car was put upon an efficiency basis the public demanded the same attention be given to their comfort. Manufacturers then sprang up who produced tops and glass fronts for cars, and these were finally added by the manufacturers as parts of the regular equipment. "This same spirit of public demand," says M. A. Leach, distributor for Dorset, Liberty, King and Premier motor cars, "has resulted in the production of a great number of enclosed cars."

Formerly, this type of car was owned only by the aristocracy, owing to the expense of the specially built bodies. Today every car manufacturer, from small to large, puts out a closed car model.

"We have had a great deal of success with the Dorset sedan. Its light weight and economy of operation appeal to the man or woman in moderate circumstances who desires a car adaptable to all seasons of the year." This same fact is also true of the Liberty Six. This car, more commodious and more luxurious, is at the same time very economical in operation and its easy riding qualities make it especially attractive to the public. The small amount of energy that is required in the handling of the car is surprising in itself.

In this section of the country where the average person takes longer trips than in the East some people find that a larger car best meets their requirements. The King eight, mounted on the same chassis as the light armored motor cars for the United States Marine Corps, has power enough to take it anywhere, and its refined lines and rich finish ramming the popular seven-passenger sedan at its price.

Adventure. "The greatest years of the motor cars are before us, and the grammar school and the high school boys of today should give the matter of their future career very serious consideration. The years to come will be big manufacturing years. The constant changing for the better all the time. Every day we are living in a more improved world, and this improvement will continue and cannot but mean gigantic strides in the automobile and its allied industries."

To return to the question of shortage of skilled labor - this is certain to mean a shortage of quality motor cars, and believe that in another year, high-grade cars will be at a premium everywhere. Automobile factories can easily be adapted to the manufacture of necessities, and many of the plants are already doing considerable work. This, coupled with the pronounced shortage of men, means less automobiles available.

"There can be no such thing as an over-supply of good automobiles. This holds good after the war as well as the present. Only the manufacturers whose goods do not come up to their claim will be in danger. The automobile business is good everywhere and will continue to be. Take for instance, the truck and tractor field. The world today demands many times as many trucks and tractors as can be built in this country during the next three years."

NECESSARY. "There was never a greater injustice done any industry than that of calling the automobile a non-essential. The automobile is just as important a factor in the general development and efficiency of our activities as the telephone, telegraph or railroad. Any move taken to retard the progress of automobile manufacturing is a move to slow up the tremendous force of our national energy."

"No one agency is playing so important a part in the world today as the automobile. When emergencies have arisen it has been the automobile and the automobile manufacturer who have been called upon to save the day. Not only so, but the automobile factories today supply necessities, gun carriages, submarine chasers, projectiles, and a great many other things of importance in equipping our National Army and the armies of our allies."

When freight conditions were at their worst in the East, it was the motor truck that was called upon to transport needed army supplies to the Atlantic Coast. Hundreds of these trucks ploughed through the snow and blizzards and successfully accomplished the task put up to them. Every one knows how important a part motor transportation has played in the battlefields of Europe.

Today it is only the man who is prejudiced through lack of information who even thinks of this great industry as a non-essential. It is, in fact, one of the most essential of all the industries of this country today and will play a larger part in the world development in the years to come."

Pep Producers.

(Continued from First Page.)

officials from Gen. George Goethals, acting Quartermaster General at Washington, from the State Inspector of Oils in Colorado, and from the chief petroleum technologist of the government Bureau of Mines, stating that so far as the government could discover, and so far as the other departments could discover, the product offered from its headquarters in the South was a good combustion lubricant and nothing more, and at \$1 a bottle pretty expensive lubrication.

In fact, the State of Colorado officially declared it to be worthless, and so stated in a letter to the Inspector Blackmar, and there was no government sanction given it, according to the highest authority.

However, it is possible to give gasoline more kick than it actually has, but the process is so expensive that it isn't worth the candle. Picric acid is the able agent that will do the work, but by the time a motorist buys enough picric acid to get any results he is bankrupt, and so he decides to revert to the maintenance of the Rockefellor foundation.

An interesting display of new de-funct patent gas medicine is visible in the oil inspecting office up at Normal Hill Center, if any one wants to witness that high to see it. There, arranged in a neat little row, stand the results achieved by the modern P. T. Barnums of the motor world. There is a bottle of a pink liquid which looks and smells like a very inferior hair tonic, but which was fondly announced by its papa to be good for everything that ailed poor old Mr. Gasoline. That juice didn't last very long after the oil inspecting department got after it. In it was found camphor, kerosene and cochineal.

Brief was the life of some interesting-looking lavender crystals in a tube, also pronounced good for gasoline ailments. Upon analyzing it, it was found to be composed of mashed camphor balls of the common, or motley, variety, and some vegetable coloring matter of doubtful vintage. Perhaps the pulverized brick dust in capsules took the cook as a real bunkering.

Accompanying these nostrums are the instructions for "taking," and these usually state that the medicine must cut down the mixture to make it lean, and to adjust the carburetor

so that the engine gets the maximum of efficiency from the gasoline. According to Inspector Blackmar, if the average motorist would take care of his motor and keep his carburetor properly adjusted, anyway, he would never need to think of or get mixed up with, any patent gas medicine.

A letter has just been received by Inspector Blackmar from the Bureau of Standards of the National Chamber of Commerce at Washington, endorsing the local campaign to stop the sale of "fake" gasoline pep inducements, and outlining that the majority of them are without virtues so far as making gasoline more efficient, is concerned.

There is every indication, say automobile club officials, that the motorist will become a general issue throughout the country, following the lead of Southern California and Colorado, to stop the sale of the national Bureau in Washington.

SERVICE MANAGER GIVES GOOD ADVICE.

VENTURES TIPS THAT MANY OWNERS AND DEALERS OFTEN FORGET.

A house built upon a solid foundation will stand for years. If, however, the foundation is weak the house totters and falls, and it is likewise with the application of the Gates half-sole tire, says Charles Howard, service manager for the International Sales Company. "Applied to a good casing, in which the fabric is sound, the Gates half-sole will give service greatly exceeding the ordinary tire."

According to the service manager, says Mr. Howard, certain factors must be considered with it. "Fifty per cent. of the tires are put on or cut and before the motorist is admitted to the store, a thorough inspection and selection of the tires must be made. These tires and the application in assembly and of proper equipment, but even of tire repairs are in proportion to the care and attention in the work. The car tire with every detail is made to realize this."

THE NEW BRISCOE The Car With the "Half Million Dollar Motor"

The new models have arrived. I want you to see them. Ride in one, drive it yourself. Then judge and compare.

- There are six points I want to impress upon you:
- 1st. The half-million-dollar motor, that is quiet, quick on the getaway, powerful, vibrationless and trouble-proof.
  - 2nd. The full-elliptic springs that ride easy over all kinds of roads, that bring you home after an all-day trip without "that tired feeling" and that add great mileage to the life of your tires.
  - 3rd. The Briscoe is economical. It runs farther on gasoline, oil and tires, and the repair expense is low because the Briscoe "stands up."
  - 4th. The Briscoe is 99% manufactured in the 11 plants of the Briscoe Corporation, that is backed by millions.
  - 5th. That \$70,000 worth of parts are kept in stock on the Pacific Coast by a factory branch, and a good stock right here in Los Angeles.
  - 6th. Don Carlton service goes with every Briscoe car sold. You will never know how to buy a car in the "under \$1000 class" until you have seen, ridden in, and investigated the Briscoe car. Do it today.

New shipment just arrived. DON W. CARLTON 1058 So. Flower St. 60388

How the Moreland Gasifier Has Minimized Transportation Expense

The Moreland Gasifier is one of the most economic fuel devices ever made a part of the motor truck engine.

The Moreland Gasifier permits the burning of distillate and other low grade fuels at a saving of about one-half over the cost of gasoline and gives high-grade gasoline a higher horse power value than the same fuel possesses in the same motor not equipped with a Moreland Gasifier.

Moreland owners of the past eight years have given this device a thorough acid-test and all join in attesting its great value.

Figures never lie. We have at your command a statistical table which will prove that the Moreland Gasifier is unsurpassed from the point of economy. It is the

only genuine and practical fuel reducer that has stood the test. All Moreland trucks are equipped with the non-duplicated Gasifier and all Moreland products burn low-grade fuel, which insures the utmost economy of operation.

Very few trucks, exclusive of the Moreland, constantly and successfully burn distillate. We request that you ask any Moreland driver regarding the satisfactory and economic results of the Moreland Gasifier. There are a number of trucks on the market that are advertised as being distillate-burning vehicles, but upon investigation you will find that the majority use gasoline.

The Moreland Gasifier has made good—we encourage investigation without any obligation.

MORELAND MOTOR TRUCK CO. General Office, Sales Department and Factory 1701-1731 N. Main St. Los Angeles, Cal.

**TIRE BARGAINS**

**STANDARD MAKES**

Goods shipped to all points C. O. D. Money refunded on goods returned intact within one week.

Size	Price	Size	Price
28x3	\$ 7.70	30x3 1/2	\$ 11.10
30x3	8.20	32x3 1/2	11.70
30x3 1/2	10.55	34x3 1/2	12.90
32x3	11.10	36x3 1/2	15.50
32x3 1/2	11.70	38x3 1/2	16.55
34x3	12.90	40x3 1/2	17.30
34x3 1/2	15.50	42x3 1/2	17.60
36x3	16.55	44x3 1/2	18.40
36x3 1/2	17.30	46x3 1/2	18.65
38x3	17.60	48x3 1/2	23.00
38x3 1/2	18.40	50x3 1/2	23.80
40x3	18.65	52x3 1/2	24.55
40x3 1/2	23.00	54x3 1/2	25.00
42x3	23.80	56x3 1/2	25.80
42x3 1/2	24.55	58x3 1/2	26.20
44x3	25.00	60x3 1/2	29.30
44x3 1/2	25.80		
46x3	26.20		
46x3 1/2	29.30		

Non-Skid Prices in Proportion

**SPECIAL**

Non-Skid Seconds

33x4	16.55
34x4	16.90

Prices subject to change with out notice.

**AUTOMOBILE TIRE CO.**

6th and Olive Streets.

7377 N. A. Demarest, Bldg., 4049 6th Ave. New Avenue, San Francisco 1738 Broadway, Oakland Second and B Streets, San Diego Hotel Front Building, Fresno

The Oldest Automobile Tire Jobbing Concern in the United States and the Largest in the World.

Open Sundays and Evenings

**REPUTATION WINS SALE; OLD ADAGE PROVES GOOD.**

REPUTATION apparently clings to motor tires as well as to people, whether good or bad. Let the public learn that a product is not up to standard and it will be condemned quickly on the evidence of others. If it is reputed to be an article of high standards, persons who never have had occasion to use it will speak of it in favorable terms. This fact was impressed upon J. B. Wood, exclusive distributor for the Century-Planfield tire, a few days ago. Two automobiles stopped in front of the store at No. 927 Ben C. Norton, No. 623 South Harvard avenue, from the Bay City. Norton with his driver had motored to San Francisco in his Century-Planfield tire and had intended returning the same way, but when the storm, which made rivers of tiny streams, broke, he changed his mind and came southward via the de luxe route. Cathrill, with his Century-Planfield, the next morning at 3 o'clock, started in the same direction and by 11 o'clock of the evening of "same day he was in Los Angeles. Take it from me, there were no problems in the way. I was piloting a hydroplane or a snowplow. Everything was duck soup until after leaving Mesto and Mesto struck all kinds of water. At times there were hundreds of yards of ice in the opinion of Mr. Wood, and canals. There was considerable snow on the Tehachapi Mountains, and a beauty of a landslide in Boulder for miles—there was no name for it," said Cathrill.

**THE TEST.**

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**DRIVEWAYS.**

**BIG WAR-TRUCK FLEETS IMPOSING SPECTACLES.**

AN INTERESTING picture of midwinter driving in the Middle West a few weeks ago was contained in a letter received last week by Manager F. M. Headlee of the Southwest Motors, Maxwell distributors, from F. W. Gibbs, the Maxwell road engineer, who piloted the Maxwell one-ton truck on its recent eastern test runs under A.A.A. observation. At the completion of the run from New York to Florida and return, Gibbs drove the truck back to Detroit, for the most of the distance along the Lincoln highway, which was kept open to permit the passage of war trucks under their own power to the eastern seaboard. "It was no small job keeping roads open this year, either," wrote Gibbs. "In places across the Alleghenies we drove between walls of snow ten feet high, where the road-clearing trucks of the Pennsylvania road department had cleared the way. You can get some idea of the excellent work they had performed by the fact that we made 200 miles in a single day with the truck from New York to Pittsburgh."

**INSPIRING.**

"Every day we would meet a fleet of war trucks en route to the Atlantic Coast. First we would realize that the business of winning the war has the right of way over everything else. First we would see a man in a uniform, whose duty it was to clear the road of all traffic. Everything had to stop. The trucks were by. Electric cars, railroad trains, every-

**MORELAND**

ATTENTION

3 New 1918 Model Pikes

- One 1918-48 7-Pass
- One 1918-38 7-Pass
- One 1918-38 5-Pass

Sold at big discount. No trade in.

E. L. ERICKS



## Local Fashions Making Big Reputations East of Rockies.

Cars Fail to Shine  
in Texas.

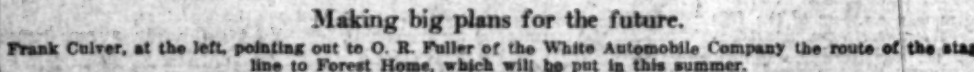
RLTON  
er St. M. 671

any more long service in

**CK CO.**  
Los Angeles, Cal

Harold L. Arnold  
7th at Grand

**ATTENTION**  
PIERCE-ARROW PROSPECTIVE BUYERS.  
*New 1918 Model Pierce-Arrows*  
One 1918-48 7-Passenger  
One 1918-38 7-Passenger  
One 1918-38 5-Passenger  
and a big discount. No trouble to show them  
**E. L. ERICKSON**  
1100 West Vernon A



A black and white photograph of four men with an early 20th-century automobile. One man is crouching in front of the car, another is standing to the right holding a long pole, and two others are visible inside the vehicle. The scene is outdoors on a dirt road.

Two ways of getting through the snow.

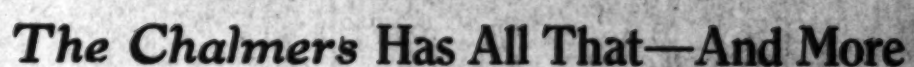
**GRINDER IS SAVER  
OF FACTORY TIME.**

### Obstacles.

The eight-mile run from the boulevard, up Mill Creek Canyon to Forest Home, was made by the heavily loaded Apperson on high gear for the entire distance, with the exception of two sharp turns, where Hunter cut down speed as a safety measure, inasmuch as it was tight driving. From Forest Home to the end of the road the grade is about 2000 feet in less than three miles. In places the road is merely a trail over rocks, and the front end of the car tries to take in different directions at the same time and the rear end touches all remaining points of the compass.

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**HANDLER MOTOR CAR COMPANY, CLEVELAND, OH**



You will note that every feature attracts. And you will appreciate the proper relation of the different units. None dominate at the sacrifice of others.

And when you come to ride in the **Chalmers Six** and drive it—such a fine, all-'round, dependable car!

Power, speed, responsiveness gain complete significance. Also car comfort, Also economy.

Chalmers Engineers have made no sacrifices in order to give a few features predominance. If ever a complete car was built, it is the Chalmers.

Let your wife confirm our statement that the beauty and elegance of the Chalmers measure up with your mechanical requirements.

Your combined opinions will assuredly award this car first consideration. Five months **FREE** Coupon Service to **Chalmers** purchasers.

## Broadway 5410

Home 60081

**The Los Angeles Times** introduces its advertising patrons to the most desirable class of consumers under the most favorable circumstances.

THE TIMES Always Has the Most  
Want Ads.  
THEY REACH.



As dignified  
as the name  
it bears

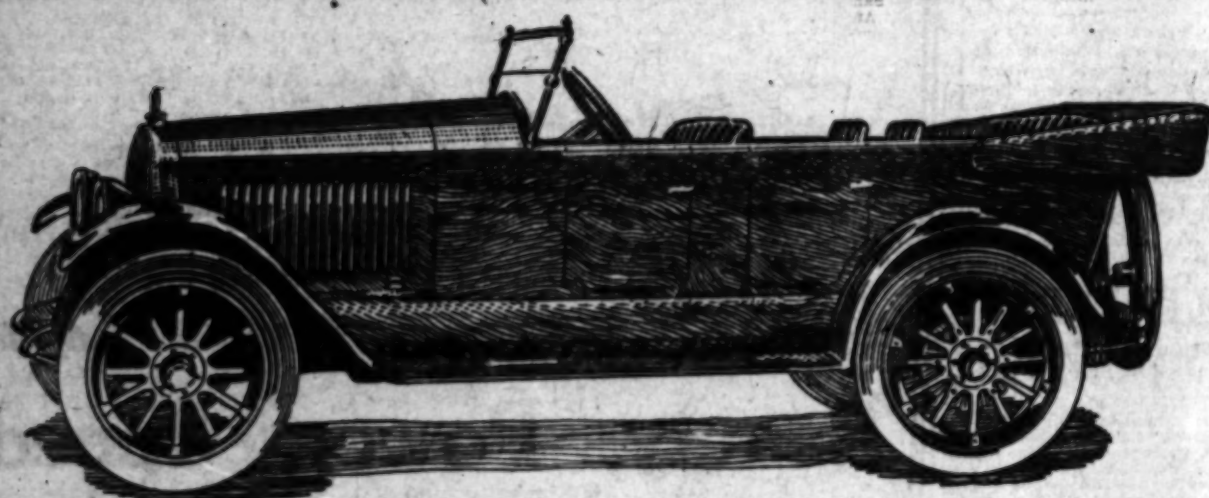
IT IS most fitting that the Cadillac motor car should bear the name of one of the oldest and most distinguished families of France.

The coat of arms, which dates back to the Crusades, is used as the radiator emblem on Cadillac cars. It speaks volumes in courage and honor for the forebears of Antoine de la Mothe Cadillac, the founder of Detroit.

And what car is more worthy to bear this honorable emblem? The makers of no motor driven vehicle can point with greater pride to its past history. From its first day the Cadillac has been a car of honorable ideals. Its makers have been ever reaching upward and at no time in its history has the Cadillac stood higher in public esteem than it does at this moment.

California **D. L. L.** Distributor  
12th and Main Sts.

Cadillac



Announcing

## The Cole Aero-EIGHT

The Sponsor of a New Vogue

It is our pleasure to announce the first appearance of the Cole Aero-Eight at our show rooms. An epoch-making advance in designing that authoritatively establishes new standards, we recommend it to your personal attention.

Visitors at the New York and Chicago Shows, followers of the most advanced ideas in automotive design, were enthusiastic in their endorsement of the seven-passenger Tourster, four-passenger Sportster and two-passenger Roadster which have just been added to complete the Cole Eight line. These cars of perfect symmetry stand out as distinctly from preconceived notions as battle cruisers in a fleet of fishing smacks.

Their lithe, dashing lines are due to the new cowls and low, gracefully beveled sides—the latest and the greatest creations of Cole craftsmanship. Nine body styles to select from, including 4 closed models.

Irving Motor Car Co.

842-46 South Olive Street

ALL KINDS OF  
**JOB PRINTING**  
By the TIMES-MIRROR  
Printing and Binding House  
Orders Delivered as Promised

THE TIMES Always Has the Most  
Want Ads.  
THEY REACH.

## New Kind of Service Offered by Big Factory



When a motor car thought it was a boat.

Here is a close-up of the 1911 Hupmobile belonging to Mercedes Temple of the Lasky studio. She and E. Schepeler were returning along Pico boulevard from Venice Sunday night, and at the point shown in the lower photograph the machine was picked up by the floods, carried 100 feet and deposited on the city-bound P. E. car track of the Short Line. There the machine lay all night with water and mud pouring over it and in the morning it was pulled out and towed home in perfect shape except for the dirt. Even the lights were still burning. In the photograph the headlight nearest the camera is seen to be still half filled with water.

Huge Numbers.

## BATTERY MANUFACTURERS DOING TREMENDOUS WORK

AT A time when our nation is in the midst of a great war, charged with the duty of performing an active share in addition to furnishing the means, men, and materials for aid to the Allies, the vast part which the entire motor-car industry is playing is beginning to be more widely appreciated.

The magnitude which the automobile industry has attained in the past few years has enabled the government at this time to place in the hands of the manufacturers a stupendous job. It is only when one is acquainted with what the manufacturers have accomplished in the last decade, that their ability to handle the work becomes apparent. And furthermore, as this industry has developed, other allied manufacturers have experienced a corresponding growth, according to Mr. J. Tobey, general manager of the Western Auto Electric Company, distributors and service station for Willard batteries.

"In 1913," says Mr. Tobey, "485,000 motor vehicles were manufactured. In 1914, the number increased to 660,000; in 1915, to 835,000; in 1916, 1,017,000, and in 1917, 1,377,183. At the same time it is interesting to note the development of another famous line, closely allied to the motor industry. Among the most noted names of tire, car-buretor, spark-plug, or other parts manufacturers, there is none more widely known, or which has achieved greater dominance in its individual field than Willard batteries, as the following figures will testify.

"In 1912, Willard built 26,000 batteries; in 1913, 46,500, an increase of 80 per cent.; in 1914, 100,000, or an increase of 59 per cent.; in 1915, 260,000 batteries or 160 per cent. growth, and in 1916, 399,000 Willard batteries found a ready market, an increase of over 140 per cent.

"At the same time, Willard also made the following world's records. In 1916, there were 195 vehicle makes manufactured. Nine battery manufacturers supplied these makers. Willard equipment was used by sixty-nine, and the eight other battery makers split thirty-nine brands of vehicles between them. In 1917, with 132 manufacturers in the field, eight remaining battery manufacturers supplied the demand. Willard being specified by ninety-three makers, and the remainder being apportioned among the remaining seven battery makers.

"In 1918, statistics show that 134 makes of vehicles will be produced; and the battery business will be cared for by six other organizations besides Willard. These six other battery makers will share thirty-four makes of cars between them, and Willard will be featured by ninety-six makers. In addition to handling this vast volume of business, Willard is also, as might be expected, putting its experience, materials and facilities at the disposal of the government.

"Always acknowledged a leader in battery construction, Willard's greatest achievement, of recent date, has been the perfection of an insulation that will not break down or deteriorate. When due consideration is given the fact that fully 90 per cent. of all battery troubles are caused by the inherent weakness of the wood separators used for battery insulation, one can quickly realize the importance of the threaded rubber insulation used only in the latest, or 'still better' Willard."

Real Joy Ride.

**PUTS IN PERFECT DAY ON WORST OF ROADS.**

SEVEN people, a Peerless eight, and an Alford dog feature a part of a programme that had not been entirely billed by A. M. Young, manager for Smith Bros., last Sunday. And, incidentally before the Peerless had fallen, others than those mentioned—and the dog—were filled in on the programme. "Just to show what the Peerless eight will do on the boulevards and on mountain roads, we left the city last Sunday morning headed for San Bernardino and Squirrel's Nest. Not until we began climbing the grades did it begin to rain, and then it came down in earnest. The bunch with me was game and we kept going. Oh, it was some ride, for those grades were nothing short of rivers and long streaks of the finest assortment of mud you ever saw," related Young.

"If the Peerless was ever given a real try-out it had it last Sunday. It did everything except skid and turn over. There may have been a few times when some one in the party felt uneasy, but there was no outward evidence of it. Even with all the slush, for the rain was melting the snow, almost by inches, the braking and the spring suspension of the car was so near perfect that there was no sliding or skidding. After I had deposited the party at their homes, the speedometer showed a total of 176 miles for the day's work."

But Young's work was not over. He found people marooned waiting for cars that did not come and others who wanted to get across streets that were rivers and who were afraid to take a chance. And so the Peerless picked them up, and not a few had the pleasure of litely riding in a quality car, and although offers of remuneration were forthcoming, downright honest thanks was the only payment accepted.

"And do you know, boy, that in me it was the end of a perfect day," said the busy manager for Smith Bros., as he turned to meet a visitor.

**TRUCK STATISTICS FOUND TO BE WRONG.**

Recent reports of there being but twenty-one trucks in the entire country of Japan are found upon investigation to be not true. About thirty days ago there were shipped the first two Moreland trucks to Japan—a passenger bus and a dump truck—which bring the total up to twenty-three.

## NEW SERVICE IS OFFERED

Policy is of First Importance

Big Corporation Tends to a New Look

No Strings Tied; New Service to be Offered

The Savage Tire Company, just announced a new policy of vital interest to all tire users. The announcement at this time, is very timely, as the question of tire safety is more important than ever before. The company will be offering a new service to its customers.

Raymond V. Morris, general manager, has outlined the activities of the Savage company, which is the man responsible for the service idea.

In a recent interview, Morris gave some interesting details of the question of the service idea, taken as seriously as the offers of service, in the with tires and tubes, and the of the tire companies. Morris is the United States representative of the Savage company, which has gone to extraordinary lengths to insure the quality of the material used in the work.

**HERE'S CHANCE FOR REAL CONSERVATION**

One of the factors in the conservation of energy is the use of electricity. The Savage company is offering a new service to its customers, which will be of great benefit to them.

**MOTOR CAR IDEAS ALWAYS CHANGING.**

The increasing popularity of the motor car for every day use is an indication of how ideas in motor cars are changing. Says W. D. Dunham, the Ford agent on West Seventh street, who has been identified here with the auto industry for many years. Sedans and other models of the most expensive machines, for winter use, owned by those who had other cars as well.

**Have Your Ridden**

The exclusiveness of complete protection from changes—its openness and an irresistible appeal.

Once you have ridden of car will quite meet

The luxurious Pre as its name implies, is instantly from one into the for car comfort and, of course, shift found only in Premium motor.

For a powerful, the King "8" is a car the refinements of the close car. The chassis is the close for light armored motor car

The distinctive appearance for 5 people, places quiet, unusually easy in an ideal car for Milady's wheel will convince you of

Combining comfort achieved in the Dort 8 as skilled hands know how the Dort that set the work of the hour. Investigate its quality goes clear through.

These four makes usual price range. The income. Let us demonstrate here.

**LEACH M**

A Motor

1132 S

1127 S

**Greer-Robbins Company**

Twelfth and Flower Sts.

Distributors for California, Arizona

Broadway 5410.

**Greer-Robbins Company**

Twelfth and Flower Sts.







# The Announcing

—of—

## INTERNATIONAL MOTOR TRUCKS

Through the

### S. F. Seager & Co.

1205 SOUTH OLIVE STREET,  
Los Angeles, California,

In Their New Home After April First

1400 South Figueroa Street

International Motor Trucks Are the Product of the  
International Harvester Company of America.

There Are Seven Sizes to Choose From.  
Suitable Bodies for Every Business.

For Pasadena Vicinity

The S. F. Seager Company Announces as  
Local Representatives

THE GRACE MOTOR CAR COMPANY  
49 South Marengo Avenue.

Your inquiry solicited if you are in the market for a  
high-grade, economical and serviceable motor truck

**The Only One!**  
The Only Rotogravure Newspaper Press West of the  
Rocky Mountains Installed by "The Times"

**The Only One!**  
The Only Rotogravure Newspaper Press West of the  
Rocky Mountains Installed by "The Times"

## Ford Owners Save Your Tires With Firestone Demountable Rims

PUT Firestone Wheels on your Ford. These Wheels are equipped with Firestone Demountable Rims which give your tires every chance to produce maximum mileage. The continuous grind of the "wobbling" uneven rim wears the tire in spots. The Firestone Continuous Wedge-Ring insures uniform wear and eliminates all unnecessary road friction.

Firestone Wheels for Fords are supplied in three colors: black, cream and natural varnish finish.



# Firestone

## WHEELS FOR FORD CARS

You owe it to yourself to find out how Firestone Ford Wheels are made to save tires and money. With the same secure fastening as the Firestone Demountable Rims used on the largest, most expensive cars. Get in touch with the nearest Firestone dealer. Have him show you that:

1. The perfect fit of the rim keeps water and sand from seeping into the casing.

2. Rust can not make rim stick to the fellow band. Removal is made easy.  
3. Squeaking is impossible.  
4. "Wobbling" is prevented by the wedge ring which grips the rim evenly and firmly.  
5. Tire changed in five minutes—you can do it yourself.

FIRESTONE TIRE AND RUBBER COMPANY.  
1165 South Figueroa St., Los Angeles, Cal.

## Expanding TAKES OVER A NEW LINE.

Famous Truck is Boosted by a  
Genuine Hustler.

Line will be Pushed in the  
Southland.

Standardization of Parts is  
Feature.

International motor trucks, manufactured by the International Harvester Company, are to be distributed in this territory by S. F. Seager & Co., according to an announcement made last week by Bob Weaver, vice-president and general manager for the company.

"Although we have confined our efforts to motor cars, we have felt for some time that the commercial truck field was constantly broadening and we feel that we are fortunate in securing the International or distribution here. Although having the greatest prestige in many other sections of the country, the International is but little known here. The International Harvester company has been serving the wide world for more than seventy years, and today, backed by \$70,000,000, it has one of the largest plants in the world devoted exclusively to the manufacture of motor trucks," said Weaver.

**OWNS MINES.**

"With its tremendous financial facilities it has an organization and equipment the like of which is probably not equaled anywhere. The corporation owns its own mines, forests and lumber mills and even to the most minute part International trucks are International Harvester products. So you can see that parts are not assembled from one part and another and the result is that whatever may be the scarcity of material with others, International trucks are being turned out in a steady and ever-increasing volume. The corporation's plans for this year call for an increase of more than 200 per cent. over that of last year. Throughout the East and the Middle West thousands upon thousands of these trucks are in operation in scores of different trades."

The tremendous success of the International has been due to its dependability under varied conditions of travel and weather and its extremely low cost of operation and maintenance. In Michigan, the home of the motor truck, last year the International was several hundred ahead of its nearest competitor in the number of trucks in use there, according to registration figures, it is claimed.

"One great feature of the International," said Weaver, "is a real standardization of parts. Every part being made by the company, from bolts to motor, there is no delay in replacement and dealers feel that they have an almost inexhaustible supply to draw from if necessary. The truck is manufactured in seven models and as soon as we move into our new quarters on South Figueroa street we will have on display the leading models."

## SPARK PLUGS ARE OFTEN VERY FUSSY. SOURCE OF MUCH TROUBLE THAT IS DIFFICULT TO LOCATE.

Spark plugs are a source of much obscure ignition trouble that car owners have great difficulty in locating. In many cases the insulating material used in the construction of the plug is porous, permitting electric leakage through the porcelain, and also allowing absorption of the carbon formed with each explosion. Until finally the insulation changes its properties entirely. In such cases the car owner having cleaned his plugs and finding the trouble still existent, assigns its source to some other part of the system. In these circumstances the car owner is recommended to consult the service station of a spark-plug manufacturer and get a plug equipped which is especially adapted to his car.

## THINGS TO KEEP IN MIND WHEN DRAINING. MAKE CERTAIN NO WATER REMAINS IN THE PIPES AND JACKETS.

When draining the water system of the car it is well to make certain that no water remains in the pipes and jackets, by rocking the front of the car. This will throw the water out of bends and pockets. The majority of thermo-siphon cooling systems drain off easily enough, but in the pump system it is necessary to use care. It is a good plan in draining off the water to let it run into some receptacle, a large can or pail, so that it can be used again. The reason is that in all water there is a certain proportion of foreign matter that forms deposits on the cylinder jackets and radiator. In the water already used this deposit may be supposed already to have been made, whereas with fresh water a new deposit will be precipitated. By using the same water over and over again this furring up of water spaces may be minimized.

## LATEST CURTAINS ARE WATERPROOF.

"There are many curtains that work satisfactorily when the rain is a light one or only comes in showers, but it is different when it is a real downpour and a steady one," said Charles Link of the Chandler and Lyon Top Company. "It is under such conditions that one often finds that storm curtains on one's car are not waterproof."

The Chandler and Lyon Top Company is now, it is asserted, turning out specially made curtains that are fitted to meet the conditions that have which are, it is declared, waterproof, no matter how severe the storm.

## Another Truck Line Invades Local Commercial Field



"Waal, I swan—lookit them there holes, wouldje?"

Engaged in a still hunt for a little high-class scenery, a party in a Stearns-Knight, equipped with Palmer cord tubes and the customary holes in the casings for demonstration purposes, wandered into this beautiful canyon. Their excitement at the beauties of nature was nothing compared with the agitation of the old miner who couldn't imagine how a car could run with holes cut in the outer casings of the tires.

## DREAMER GIVES WORLD ONE OF BEST TRUCKS.

"THE human mind, like a body set in motion," says B. P. Bryant, technical expert of the Republic factory, now with Harold L. Arnold, "tends to move forward in a straight line. Every once in a while, however, there comes an upheaval in the stereotyped way of doing things and traditions are speedily swept into the limbo of things that were, but are not."

"A human mind with a 'kick' in it," said the mark of genius, "futters up out of the universal rut of the million fellow-minds, takes a squint at a given situation, discovers a shorter route to a given result, and bingo! a million dollars' worth of perfectly good machinery is abandoned to a given result, for a machine that will do the work in less time, do it more economically and do it better."

"For years and years the 'orthodox' method of transmitting the torque or tractive effort of a gasoline engine to the rear wheels of the self-propelled vehicle has been to 'twist the real axle' by means of the well-known single drive pinion and single ring gear. This method is even today nearly universal in the field of passenger car traffic. However, a dreamer named Torbenesen reasoned with himself: 'Why put the entire driving stress of a fifty-horse-power or a hundred-horse-power engine all upon three teeth of a single ring gear and a single drive pinion?'

"And when the dream was finished the Republic Truck Company of Alma, Mich., made its bow to a waiting world with a truck in which there are three drive pinions and three ring gears, one each in the two rear wheels and one each in the differential, with two axles, one behind the other, one to carry the load and one to 'push it along,' with the 'twist' of the engine up front applied to the wheels like a steam locomotive instead of to the rear axle like a bicycle or passenger automobile."

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The Chandler and Lyon Top Company is now, it is asserted, turning out specially made curtains that are fitted to meet the conditions that have which are, it is declared, waterproof, no matter how severe the storm.

## CARBURETORS ARE TURNED OUT FAST.

The Master Carburetor Company is now turning out a three-inch carburetor for one of the largest gas engine concerns on the Pacific Coast. "We have been furnishing this concern with smaller carburetors for some time but the three-inch device is destined for marine service, so we have been informed," said C. G. Harness, president and general manager.

One Ober, formerly with the Stromberg service department on the Pacific Coast, is now associated with the Master Carburetor Company and the capacity of salesmen and will travel this territory. The shipment of machinery from Detroit that has been several weeks on the road has been received and is now being installed at the enlarged plant of the company on South Los Angeles street.

## USED CARS MAKE MONSTER DISPLAY.

Probably the greatest collection of Fords ever assembled under one roof is now on display at the Fahy-Atterbury Ford Agency on Grand avenue, not secured through any intention of making any sort of an unusual display, but picked up on trades, and through the regular course of business, to supply those who desired immediate delivery.

In this manner Mr. Fahy and his associates have gathered quite a collection of used Fords which make quite a showing when they are all put together under one roof.

## COMPLETE WRECKING OUTFIT INSTALLED.

Don Lee has just installed as part of his service department in Los Angeles a complete wrecking outfit. For this work a new service wagon has been specially constructed on the back of which has been fitted a steel crane with a chain fall for lifting wrecked cars. By this method a wrecked car can be easily and quickly taken to the garage. When the wreck has been lifted, the wrecker truck is wheeled under it and the car is soon in the shop. This wagon will be on duty night and day.

## AUTOLOOKING FOR SOFTER THING.

"To bounce or not to bounce, that is the question," remarked the owner of a universal car after he had driven into the service station of the California Sales Company, distributor in California of the Humber shock absorber for Fords. "I've stood the gaff over unupaved roads for some time and now I'm looking for something softer. If I can't have shock absorbers on this car, I'm going to have them attached to that part of my anatomy that has been working overtime since the rains made going rough."

## SOMETHING ON AUTO ANATOMY

Spring Suspension  
Modern Cars

Best of Engines  
Diagrams

Subject is Sifted  
Experts

The portion of the mechanical anatomy of the automobile that exists among engineers and mechanics is the spring suspension. In the rear spring suspension of cars of today there are many different designs, many combinations in use on the same car. In the early days of the automobile did not realize the importance of proper springing and in their vehicles rapidly under the vibrations of service. Since then the study of springs has become a science, and while, as we have pointed out, the designs differ widely in type, still the spring of today are really very serviceable.

On one thing practically all are agreed and that is the semi-elliptic spring is one of the best. It is held forth on the front of the present cars in two types, one is the elliptic, cantilever in type, and the other is the platform and transverse variations make up the list.

It is obvious that the serve a double function, bear the weight of the superstructure of the car, cushion the shocks from travel, so that the car is to places and the death. In cars equipped with springs, the springs must not only push the vehicle, but the springs take the weight of the car and the weight of the load of the spring is made.

(Continued on page 7)

"The HIT of the Automobile Show"

## The Roamer

America's Smartest Car

NO CAR can compare with the  
New ROAMER for CLASS,  
EQUIPMENT, POWER, SPEED  
and PRICE—\$2250 to \$3500.

The new Sedans have arrived.  
Call and see the last word in Automobile Luxury—

And the Other

"Sensation of the Automobile  
World"

## The Paterson

### SIX 45

A wonderful light SIX with beautiful body lines and plenty of POWER and SPEED.

Note the price and the specifications and judge for yourself. IT IS A SENSATION.

\$1265 F. O. B. Factory.

## Gorham-Laplan

### Motor Car Co.

INCORPORATED,

Wholesale Automobile Dealer

Temporary Location during construction of our building.

676 Alvarado

Home Telephone 53624

WITH THE CH

Notes and Problems

PUBLICATIONS IN THE REA

OF CHECKERS.

BY JOHN DOUGHERTY.

March 17, 1918.

One and Quarter, Wednesday, New York

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# Commercial Field

## SOMETHING OF AUTO ANATOMY

Spring Suspension of Modern Cars.

Best of Engineers Disregard.

Subject is Sifted Down Experts.

The portion of the modern mechanical anatomy which is the most difficult to understand, and which exists among engineers and designers, is the spring suspension. In the rear spring suspension, care of today there are many different designs, variations and combinations in use at the present time. In the early days car makers did not realize the importance of their vehicles rapidly shook under the vibrations of the service. Since then engineers studied spring to some purpose, while, as we have noted, they differ widely in regard to the type, still the spring systems of today are really very efficient.

On one thing practically all are agreed and that is the semi-elliptic spring is the one for the front of the car. Thirty-five per cent. of the cars also use semi-elliptic for the rear and the three-quarter elliptic holds forth on twenty-eight per cent. of the present cars. There are two types in the semi-elliptic, cantilever in various platforms and transverse variations make up the rest.

It is obvious that the spring serves a double function; it bears the weight of the car and cushions the shocks incident to travel, so that the car is not in pieces and the passenger death in cars complete. In the case of the cantilever spring, the springs must not only perform normal functions but must push the vehicle. In the case of the springs take the driving and the torque or twist of the vehicle is usually of the body and the

## WITH THE CHECKER PLAYERS.

Notes and Problems.

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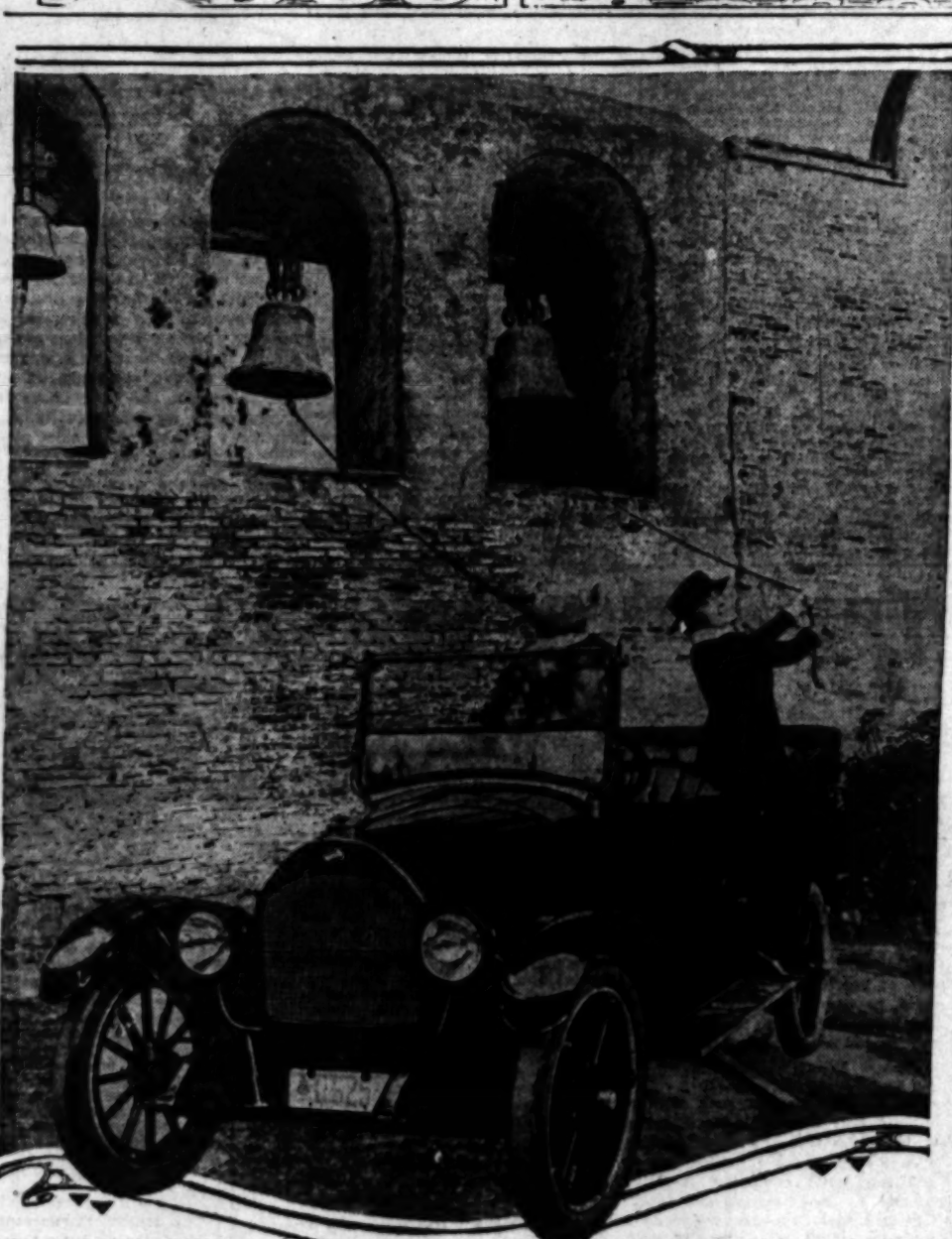
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## It was a Good War Diet at that—Didn't it Make Mr. Wad Fight? By GALE.



The belles at San Juan Capistrano. Here we have Miss Billy Monette in her new Goodrich-equipped Overland which carries her on many tours through Southern California.

**SOUTHERN CALIFORNIA ATHLETES MAKE GOOD.**

Word received in South Pasadena carries interesting news about two well-known Southern California athletes. Ralph Deane, all-around tackle for three years and captain of the 1917 Occidental State championship variety, has been made a second lieutenant at the officers' training school, Camp Meade, Maryland. He has been transferred to Camp McClellan, Alabama.

The value of football as a training for leadership is well evidenced in the case of Deane. Three months ago he entered the army as a buck private in the ordnance department. In two weeks he was a sergeant and so efficient that he was recommended for a commission.

Lieut. Edwin Lawyer, another old-time Occidental athlete, writes that his section of the Ambulance Corps is to be sent to Italy, instead of France, as first expected.

## APPOINTMENT OF A NEW STATION.

The Electric Equipment Company, automobile electricians, at Twelfth and Grand, announces the appointment of the Auto Battery Service Company of No. 8 West 8th street, Santa Barbara, as an official service station for Westinghouse and Bijur electric starters and for Elman magneto.

This appointment practically completes the service stations now acting under the Electric Equipment Company in Southern California on electric starter, generator and magneto work, although there will be many more U.S. battery service stations opened in the near future.



## Efficiency for Him—Elegance for Her

Men find this Model 90 Sedan a constant help in business.

Its power, steadfast performance and protection against the weather add immeasurably to their personal efficiency.

Women find it meets their ideas of refinement, beauty and accommodations. Above all, this car is competent.

It is easy to handle, has narrow turning radius and electric control buttons conveniently on steering column.

Its powerful motor is economical with fuel.

Appearance, Performance, Comfort, Service and Price

Light Four Model 90 Small Sedan, \$1240 f.o.b. Toledo—Prices subject to change without notice

Light Four Model 90 Touring Car, \$795

**WILLYS-OVERLAND OF CALIFORNIA**

Factory Branch, Hope at Elmer, Los Angeles, Calif. 421—TELEPHONE 4211

USED CAR DEPT., 1228 SOUTH OLIVE

PASADENA BRANCH: Colorado at 23rd, Pasadena, California 2925.

## Roamer

America's Smartest Car

It can compare with the ROAMER for CLASS, COMFORT, POWER, SPEED PRICE—\$2250 to \$6500.

New Sedans have arrived. See the last word in Automobile Luxury—

And the Other

ation of the Automobile World

Paterson

SIX 45

Powerful light SIX with beautiful lines and plenty of SPEED.

price and the specifications judge for yourself WHY SENSATION.

S. F. O. B. Factory.

am-Laplace

or Car Co.

INCORPORATED.

sole Automobile Dealer.

ary Location during construction of our building.

Alvarado St.

phone 53634—WILLYS 421.

## Westcott

The WESTCOTT SIX has all the power, speed, flexibility, convenience, driving and riding comfort, etc., etc.

Seven Models, \$1890 to \$2790 f. o. b. Springfield, Ohio.

Let us demonstrate all the Westcott superiorities to you.

Westcott Motor Sales Co.

of Southern California,

1314-22 W. 7th St., Los Angeles, Cal.

Phone 54805.

B. W. Parks.

Wm. C. Warrington.

Wm. C. Warrington.

Wm. C. Warrington.

Wm. C. Warrington.

Wm. C. Warrington.

Wm. C. Warrington.

## TIRES STAND TEST ON BAD HIGHWAYS.

SAND, GRAVEL AND WATER IN SOMETIMES AS HIGH AS CAR AXLES.

Proceeding the last heavy rains a party in a Stearns-Knight touring

company, extreme caution is advised by Mr. McVey. The recent heavy rains have brought down large quantities of silt from the hills near by and it has been spread over the pavement for a considerable distance. When wet, this makes the going very treacherous, although it has the appearance of being firm.

A number of cars have come to grief at this point recently. When trying to pass another car skidding is almost certain to result unless the car's speed is retarded.

**OAKLAND TRUCK RECORD ON FILM.**

The recent Fageol truck record from Los Angeles to Oakland in twenty-three hours and forty-eight minutes, averaging nearly twenty miles per hour, was made by a big two-and-one-half-ton Fageol truck with a full load. As a history-making event it was recorded by the moving-picture camera and will be shown shortly in the weekly moving-picture news, the delivery of special mail to Postmaster Charles Fay in San Francisco by Mr. Schelling with the Fageol truck making a particularly interesting film.

**INVESTIGATE WELL BEFORE PURCHASING.**

CONSULT EXPERT SALESMAN WHEN YOU CONSIDER BUYING TRUCK.

When contemplating the purchase of a motor truck, the intending buyer should obtain expert opinion on the style, capacity and type of truck best adapted to the use it is intended for. It is best that this advice be had from successful users of trucks. Men who have depended upon horses only to meet their transportation needs are not fitted to explain truck usages. While the hauling conditions may remain the same they must be approached from a different angle when trucks are to displace horses. In buying trucks, the same as in many other things, the advice of the experienced person usually is well worth heeding.

It is with this point in mind that salesmen representing the Smith Form-a-Truck Sales Company are instructed by Manager W. O. Gates to learn always the use the prospective buyer intends to make of the truck. It would be unfair to the buyer and probably unjust to the truck to sell a vehicle of the wrong capacity. Although the Smith truck unit is made in various sizes and for use in connection with both large and small power plants, it would be a mistake to mislead the purchaser, either through intent or by error.

**WATCH OUT ON THE HARBOR BOULEVARD.**

MOTORISTS WARNED AGAINST TREACHEROUS PLACES MADE BY RAIN.

Motorists who make use of the Harbor boulevard, report that a dangerous condition exists during rainy weather. The retaining walls alongside the road, where it passes between the sloughs, have given away in a number of places. This is due to the fact that there is no provision made for drainage and the water that collects on the surface of the road percolates between the rocks and they are undermined and cave in, according to H. C. McVey, the local representative of Oakland and National cars.

When approaching San Pedro, near the plant of the shipbuilding

**Oxweld**

WELDING AND CUTTING EQUIPMENT

Scientific accuracy and exactness of design combined with low pressure injector principle make them the most economical.

We carry a complete stock at 608 P. E. Bldg., Los Angeles.

**OXWELD ACETYLENE COMPANY**  
New York—Chicago—Los Angeles  
Main 4200.



## Beautiful Lines Feature the New Models Which Arrived in Los Angeles Last Week



Try and guess what make of car this is. Here we have a new town car model that is very deceptive in its lines. See if you can tell what it is before you read further. It is a specially-designed body known as the Anthony Special and is mounted on a Reo six chassis.

## TROY TRAILERS

### Utilize Wasted Power

Your motor truck—every motor truck will carry its rated load and at the same time pull as much more. The extra power is known as "draw-bar pull."

If you are not utilizing the draw-bar pull of your truck you are letting just that much power go to waste.

LET A TROY TRAILER CUT YOUR OPERATING COST IN TWO

Call, phone or write for descriptive literature. We have for immediate delivery 1 to 5 Ton Troy Trailers.

**Edward R. Bacon Company**

Pacific Coast Distributors  
952 East Fourth Street, Los Angeles.  
51 Minna Street, San Francisco.

THE TIMES Always Has the Most  
Want Ads.  
THEY REACH.



## GRANT SIX

\$1095

L. & C. Cleveland

After April 1st

AFTER April 1st the GRANT SIX price will be \$1095—an increase of \$40. No apology is necessary—the car is worth it. Indeed, those who are well informed regarding motor car values will be astonished that the advance in price is so slight, unless they happen to recall that ever since the upward trend in prices started two years ago, GRANT SIX price advances have been fewer and smaller than those of any other six.

Even at \$1095 the new GRANT SIX is priced too low according to prevailing standards of motor car prices. There is no other six of comparable size, beauty, power, mechanical refinement, riding comfort and fine finish at anywhere near the price.

There is no other six so economical—no other six whose thousands of owners average 20 miles to a gallon of gasoline and 900 miles to a gallon of oil—or whose owners get such tire mileage as the GRANT SIX gives.

There is no other engine like the overhead-valve engine of the GRANT SIX, with its snap, its flexibility, its quietness and freedom from vibration.

Built by men who pioneered the popularly priced six four years ago, backed by the experience gained in producing 80,000 cars, this new model is unquestionably the finest product in its price class.

The demand for GRANT SIXes this spring promises to be at least twice the output. Don't delay. Don't procrastinate. Get your order in now and make sure of the car you want, the car that saves you money the day you buy it and every day you run it—the economical GRANT SIX.

**S. F. SEAGER CO.**

1205 South Olive Street

Main 3130

F5647

ment in metallurgy and by lengthening the spring, a better riding part will be produced. It will be strong enough to bear its appointed burdens and yet will have the needed flexibility without undue rebound.

**TRIP TENDENCY.**  
The tendency today is to make the springs flat, which discourages rebound, without eliminating the necessary flexibility. It is noteworthy that designers are getting excellent results from practically all the various types. Semi-elliptics, when they are built long of really good materials, are both strong and flexible. Three-quarter elliptics have more flexibility, but also more tendency to rebound, while the full elliptic has the greatest factor of rebound of any of them. Cantilevers seem to be coming in for considerable attention and are variously used. This type has the greatest strength and least rebound, but also lacks something of flexibility. A recent experiment with two semi-elliptics, back to back, has showed us a fairly flexible suspension, strong and free from side sway.

It will be obvious that springs, just as any moving part, will need attention if they are to be kept up to their work. The shackle bolts on the ends of the springs are provided with grease cups, which should be turned down every day. The shackles are in motion all the time, and without lubrication, wear and tear will be sure to come. When the spring expands and contracts again, the leaves move over each other and there must be lubrication or the metal surfaces will generate friction and wear. It is especially true that a water is very likely to work its way between the leaves and produce rust. For both reasons, it is useful to keep the metal surfaces of the leaves covered with oil. There are devices on the market designed for just this purpose. One of them takes the form of a thin strip of perforated metal, in the holes of which a special lubricant is placed. The strips are inserted between the leaves and they are kept lubricated all the time. There are also special grease cups, cases, filled with felt soaked in oil. These are clamped to the edges of the springs and the oil is gradually fed into the leaves. If none of these methods is used, it is necessary to pry the spring leaves apart at intervals and grease them thoroughly.

Springs are held to the axle by clips, which must be tightened at intervals. It is especially true that in a new car to give the spring clips a little attention after 100 miles or so of running; they may stretch and let the spring strike the axle so as to cause a fracture. In many cars the part where the spring rests oscillates and in this case it needs lubrication, which is provided for by a grease cup. This must be turned down regularly every few days.

### LOCAL DEALER TO SPRING SURPRISE.

M. A. LEACH SAYS HE WILL MAKE ANNOUNCEMENT COMING WEEK.

Another surprise is in store for the motoring public of Southern California. Rumors have been rampant of many changes in the automobile field and but few of these have been disclosed at the present time.

"We will have an interesting announcement to make next week," said M. A. Leach of the Leach Motor Car Company. "This, in a way, is the result of my eastern trip, where I had the opportunity of going over the automobile situation at home and abroad. It is the result of close study and thorough investigation on our part, and I feel certain will prove a benefit to a large part of the Southern California motoring public as well as to ourselves."

"I am not in position at this time to make any disclosures what this announcement will consist of, but you may have the assurance that it will prove intensely interesting."

### TURPENTINE PROVES EFFECTIVE SOLUTION.

A saturated solution of turpentine in alcohol makes an effective preservative for rubber. The point of saturation is reached when a drop of the solution will not sink in the alcohol and a little more of the spirit should be added to dissolve the turpentine. Rubber articles should be painted with this solution occasionally.



**DEAR DEACON:** No, I am not looking for a kind-faced young man about thirty-one hands high to look after Lizzie. Possibly she needs someone to take care of her, but if you think I am going to hire an uncivil engineer and a horse doctor to look after her where you are off your feed.

Was it you that put the ad in the paper? Some camel-backed outh with a croquet ball where his head ought to be broke into the want column with a card that I wanted a refined and intelligent chauffeur to drive around a case of paresis and entertain it a few hours every day. I suppose he thought it was a good joke, but say; that was about as funny as a night in the morgue.

I didn't know nothing about it until a fresh duck with a mop of straw-colored hair comes to my house and wants to know was I "it." "I dunno," says a facetious-like, "I thought so." chips in the caller, "you can tell 'em as far as you can see 'em."

Then he went on to say as how he could take any car apart with a pair of tweezers and make a Lizzie climb Mt. Baldy on a jigger of wood alcohol. He had made a specialty of showing the town to hopheads and could jolly them along until they would lick his hand and sob for more. Also he had references from the hospitals and one undertaker as well as a souvenir postal card from Detroit.

"What's all that got to do with me?" interrupted I with some irritation. "I don't care if your front name is Henry."

"Well, I'm the man you been advertising for," persisted the stranger.

And then he shows me the ad with my name and number and all that.

I was as mad as a tinker with a sore thumb and told this glib that I didn't know a thing about it and had never seen it before. But he wouldn't be contented until he had we to pay him half a dollar for his lost time. "One of us is nutty," said

Another letter was from a shop in

Los Angeles, stating that they were sending me a man that was a wonder. While he was never very large nor powerful, he had a magnetic eye and had been invaluable in training panthers and leopards for the circus.

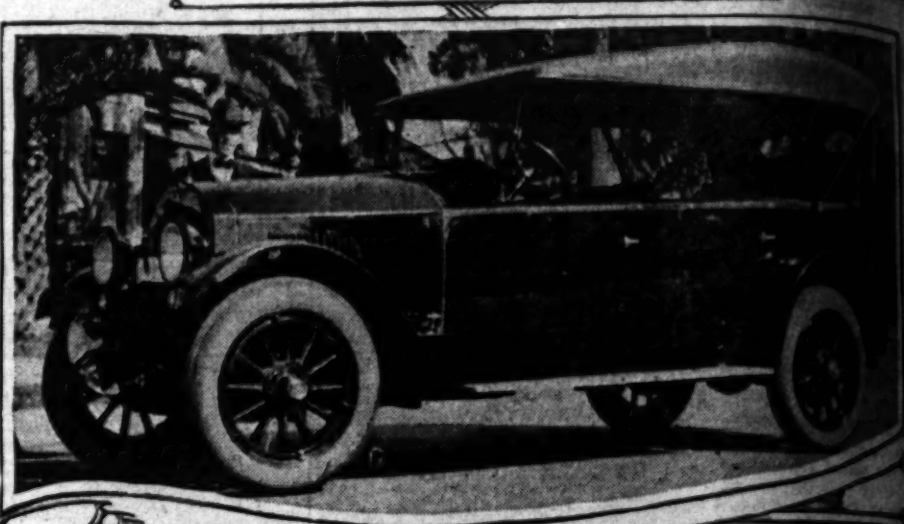
They simply had to do as he told them, and he never used a whip, at that. He would be diplomatic and at the same time effective in handling an employer who was dotty above the eyebrows. Also he was a handy man with a buzz wagon. He had made twenty-seven miles with a Lizzie on a gallon of No. 2 distillate, and he was a fiend for getting all the mileage there was in a tire.

There were a few lines from a man named Schwartzmeister, who said that he had been under suspicion of being a German spy, and wanted to live it down in a place where his life would be an open book. If he had charge of a soft-shell stationer he might help some.

He was fairly well acquainted with several popular brands of cars and was an authority on traffic regulations.

And, believe me, there were others. To be honest about it, I am still getting letters and calls from skates up his road roller, and show him the above paragraph, and know him the sights. Money is not so much of an object as a good time. Whenever the bell rings I know there is a biesty, long-shanked person there who wants to take me and Lizzie out and find which one it is that has gone wrong.

It is all on account of that crazy ad in the paper, I suppose what the judge said about me had something to do with it, but I don't think he had it printed himself. It was one of those polka-dot plates whom I have possibly nurtured to my blemish only to be stung as by a vampire at the last moment and show him the above paragraph, and know him the sights. Money is not so much of an object as a good time. Whenever the bell rings I know there is a biesty, long-shanked person there who wants to take me and Lizzie out and find which one it is that has gone wrong.



What do these lines remind you of? The body looks a great deal like that of an airplane and for that reason it is known as the Aero-style car. It is the latest body creation of the Cole factory and has just arrived in Los Angeles.

### SPEEDING, HEAT AND TIRE WEAR.

One of the most expert tire men in the country recently called the attention of motor-car owners to the manner in which tire wear increases with speed. The faster a tire travels, the more heat it generates internally. Normal speed does not increase internal heat to a dangerous degree, but excess speed will not only raise the heat above the danger point, but may actually cause further vulcanization to take place. This heat not only dries out the rubber, but causes the tire to become brittle, and the very fabric itself, lowering the elasticity of the tire, decreasing its resiliency and weakening the tire so that it will blow out early.

### RADIATOR LEAKS; THEIR REMEDIES.

When the radiator has been seriously injured, home remedies are generally useless and a soldering job in the repair shop is the only solution. However, for minor holes the car owner can perform a very fair curative operation. First make a heavy solution of one of the ordinary radiator cements in warm water. If the hole is in the bottom of the radiator or near it, take off the hose at the bottom and plug the vent with a cork. Pour in enough of the cement solution to cover the leak and allow it to stand for half an hour or so and then drain and flush out the water system.

### CORRECT PROPORTION FOR FUEL MIXTURE.

The correct proportion of gasoline for a perfect fuel mixture is .97 of a pound of gas to a pound of dry air. It is possible to operate on a mixture containing as much as .13 of a pound of gas to the pound of dry air, which is nearly twice as much gasoline as is needed. This wide range of mixture strength constitutes the greatest factor in wastage of gasoline. The majority of car owners run more nearly at the maximum strength than at the minimum, which would give them better results. They are using nearly twice as much fuel as there is any need for. Think it over.

### CUT ON THE BIAS, IS WAY THEY MAKE 'EM.

ALLOWS STRETCHING WITHOUT STRAINING THREADS, SAYS AGENT.

During a demonstration of the merits of the Gates half-sol tire recently, at the office of the International Sales Company, Southern California, distributors, an interesting feature was brought out which should be of interest to motorists.

This feature was the fact that this half-sol tire is subjected to no strain of inflation which, according to R. P. Howard, the secretary of the company, is the reason why this tire gives the unusual service that it does.

Other tires designed to hold an air pressure of from sixty pounds to 100 pounds per square inch have the stretch taken out of the fabric in building. This is essential in a tire designed to hold the stress of inflation.

"But in building Gates half-sol tires we do not take the stretch out of the fabric. It is cut on the bias."

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Som'day I will find him, and when I do, I will take a pickaxe and open him up to see what mixture of pickled herring and corn starch is doing duty as gray matter in his noodle.

You can shoot your enemies, but what can you do with your friends?



Our facilities range from top making to rebuilding the complete car.

**LEO F. BENTEL**  
WHERE MOTOR STYLES ORIGINATE

**MASTER STARTER FOR FORD CARS**

The crank is not touched. Can be used as before. THE MASTER STARTER is made up of few parts. Every part is guaranteed.

Q: How long will Tinker bearings under motor work in a motor truck? A. F. R. S.—With reasonable care and attention, they should equal the satisfactory service life of the car.

Q: What is general effect of overloading? A. L. S. L.—Overloading works a strain on springs and tends to stretch and with time, there is increased wear and tear on all parts, which is to shorten their life. It is a cruel death and shortening of life in all instances.

A. D. R. G.—The following is the most common form for figuring estimated cost of a tire. Figure depreciation at 10 per cent, or one-fifth of cost of tire, less

2201-S South Main St. BERGER & CO.

## THE RADIATOR AND ITS CARE

Information.  
How to Become Clogged Through Use.

Only Solution will Put it in Good Shape.

Only Fine if Car has been Laid Up.

BY BARNEY OLDFIELD.

Motorist, here is a little to you which you will find while in the care of a radiator. Especially should the be followed in preparing your spring use if you have had laid up during the colder days of winter, as so many owners

your radiator has become and is not performing its duty with 100 per cent. efficiency. Clean it out thoroughly. To do this, first disconnect the radiator from the engine and run your motor with five gallons of water. This will wash out the radiator and the motor. Use a thin cloth to clean the motor. Run the motor five minutes, then drain off (this will wash out the motor and you will be a long trip so far as your radiator is concerned).

Finally, refill the radiator with water and you will be in good luck. The radiator should be given this treatment if your car has been laid up. Of course, you can give thorough attention to other parts of your car, but it is back in service. It is in this series of motor

QUESTIONS AND ANSWERS  
Q: Will you kindly give an answer to the question under the following heading: "How to become clogged through use?"  
A: The radiator should be cleaned out thoroughly. To do this, first disconnect the radiator from the engine and run your motor with five gallons of water. This will wash out the radiator and the motor. Use a thin cloth to clean the motor. Run the motor five minutes, then drain off (this will wash out the motor and you will be a long trip so far as your radiator is concerned).

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